

CLAIMS

1. A method for manufacturing glass article having a length of 1000 mm or more, comprising a first heating step of vertically inserting a soot preform synthesized by a vapor phase synthesis method into a furnace and heating to a temperature lower than a vitrification temperature in a vacuum or in a reduced-pressure atmosphere so as to remove the gas remaining in the soot preform while effecting thermal shrinkage, and a second heating step of heating at a vitrification temperature so as to vitrify the soot preform, wherein, during the second heating step, the temperature at the surface of the soot preform is controlled within the range of 1400°C to 1480°C for a predetermined period of 70 minutes or more and wherein a step of cooling the glass article is provided subsequent to the second heating step.

2. A method for manufacturing a glass article according to Claim 1, wherein the first heating step comprises a degassing step of removing the gas to a predetermined vacuum level of 10 Pa or less at a temperature range of 1000°C to 1300°C.

3. A method for manufacturing a glass article according to Claim 1, wherein the first heating step comprises a degassing step of removing the gas to a predetermined vacuum level of 10 Pa or less at a temperature range of 1000°C to 1300°C, and a thermal shrinking step of heating at a temperature range of 1300°C to 1400°C in a predetermined vacuum level of 10 Pa or less.

4. A method for manufacturing a glass article according to Claim 1, wherein the furnace is provided with a heater having a plurality of segments whose

temperatures are independently controllable in the longitudinal direction such that the temperature of the soot preform can be controlled correspondingly in a plurality of parts in the longitudinal direction.

5. A method for manufacturing a glass article according to Claim 1, wherein, during each of the heating steps, a temperature at a furnace tube which separates a heater and the soot preform is determined and the temperature in each step is controlled based on the determined temperatures.
6. A method for manufacturing a glass article according to Claim 1, wherein, the soot preform is a composite preform comprising a transparent glass rod and a porous glass portion formed around the glass rod.
7. A method for manufacturing a glass article according to Claim 1, wherein, during the second heating step, the temperature at the surface of the soot preform is gradually or stepwise increased from the upper section toward the lower section.
15. 8. An optical-fiber glass preform having a length of 1000 mm or more and formed by heating a soot preform comprising a transparent glass rod and a porous glass portion formed therearound and having a predetermined outer diameter, so as to vitrify the porous glass portion so that the variation in the outer diameter thereof in the longitudinal direction is within $\pm 2\%$ relative to the median in the longitudinal direction of the outer diameter of the optical glass preform.